



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,830	02/08/2005	Atsushi Ogawa	122646	3992
25944	7590	09/06/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			ZANELLI, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/523,830		OGAWA, ATSUSHI	
	Examiner		Art Unit	
	Michael J. Zanelli		3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 97-143 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 99, 108, 110-119, 122-124, 126-129 and 132-134 is/are rejected.
- 7) ☒ Claim(s) 97, 98, 100-107, 109, 120, 121, 125, 130, 131 and 135-143 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/8/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application has been examined. The preliminary amendment has been entered and claims 97-143 are pending.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. The IDS filed 2/8/05 has been considered.
4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
5. The drawings are objected to because the blocks shown in Fig. 1 require descriptive legends.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

Art Unit: 3661

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The disclosure is objected to because of the following informalities: On page 2 delete reference to the claims since the current claims, and the claims which may subsequently issue, are not the same as those as originally filed.

7. The disclosure is objected to because of the following informalities:

A. As per claim 135, at line 13 "sate" should be --state--.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 97, 98, 100-107, 109, 120, 121, 125, 130, 131 and 135-141 are rejected under 35 U.S.C. 102(b) as being anticipated by Ernst (EP 1044829A2). Note: reference will be made to the English language equivalent (US 6,446,023) for convenience.

A. As per claims 97, 135 and 136, Ernst discloses a tire pressure monitoring system which includes a wheel-side device which measures a wheel state (i.e., tire pressure) and transmits the information at a given time interval to a body-side device which receives the transmitted wheel-state. Each wheel transmits its information based on a timing interval. The body-side device also receives vehicle state information (i.e., wheel speeds) and uses them to estimate tire pressure. The wheel-state estimations are performed for each wheel during the period of receipt of the measured wheel-state corresponding to the same wheel. The wheel-state is selected from one of the measured wheel-state and the

estimated wheel-state. Ernst further discloses using a transmitter on the wheel-side to wirelessly transmit the measured wheel-state information to a receiver on the body-side. The vehicle-state information is provided to the body-side device via a wire transmission path. See Fig. 1; col. 1, lines 6-23; col. 3, line 16 to col. 4, line 39.

B. As per claims 98, 101, 106, 107, 125, 130, 131 and 137-139, as above whereby the first state may be tire air pressure of a wheel (sprung member) which is wirelessly transmitted to a receiver on the vehicle body (unsprung member) according to a timing interval. The vehicle state/second wheel state may be wheel speed information provided via a wire transmission (Abs; Figs. 1, 2; col. 1, lines 6-24).

C. As per claims 100, 102-105 and 140, as above whereby the estimated wheel-state information is selected if it is determined that the measured wheel-state information is abnormal or has not been received at the expected time interval (col. 2, lines 49-56; col. 3, lines 15-39).

D. As per claims 109, 120 and 121, as above whereby wheel speed sensors provide a second wheel-state which may also provide the running state of the vehicle (Fig. 1).

E. As per claim 141, as above whereby a warning may be given the driver when a low pressure is determined (Fig. 2; col. 3, lines 13-15).

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3661

11. Claims 142 and 143 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ernst in view of Nantz et al. (6,671,609) and Haas et al. (6,499,343).

A. As per claims 142 and 143, Ernst is applied as above whereby a warning is provided if low tire pressure is determined (col. 1, lines 19-24). However, at the time of applicant's invention it was known in the art to utilize low tire pressure determinations to actuate other vehicle control systems such as drive control (i.e., Nantz) or tire pressure adjustment systems (i.e., Haas). One of ordinary skill in the art would have found it obvious that the low pressure tire readings generated by Ernst could be used to control other systems which utilize tire pressure readings to control vehicle systems such as Nantz and Haas.

12. Claims 99, 108, 110-119, 122-124, 126-129 and 132-134 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited documents are of general interest.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (571) 272-6969.

The examiner can normally be reached on Monday-Thursday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael J. Zanelli
Primary Examiner
Art Unit 3661

August 27, 2006